

U.S. Patent Application No. 10/009,760
Reply to Office Action dated May 16, 2006

PATENT
450101-03158

REMARKS/ARGUMENTS

Reconsideration and withdrawal of the rejections of the application are respectfully requested in view of the amendments and remarks herewith, which place the application into condition for allowance. The present amendment is being made to facilitate prosecution of the application.

I. STATUS OF THE CLAIMS AND FORMAL MATTERS

Claims 1-4, 8-10, 13, 14-16 and 19 are currently pending. Claims 1, 14-16 and 19 are independent. Claim 2 and 15 are hereby amended. No new matter has been introduced. Changes to the claims are not made for the purpose of patentability within the meaning of 35 U.S.C. §101, §102, §103, or §112. Rather, these changes are made simply for clarification and to round out the scope of protection to which Applicants are entitled.

Claim 9 has been indicated as allowable.

Claim 2 has been amended to correct the typographical error, and thereby obviates the Claim Objections.

Claim 15 has been amended, thereby rendering the 35 U.S.C. §101 rejection moot.

Applicants respectfully traverse the objections to the Drawings. Figure 2 and Figure 3 clearly show that reference character 2 is a shutter. The Specification states on page 12, "...FIG. 3, the shutter 2 is constituted with liquid crystal panel (liquid crystal shutter)."

Applicants respectfully request that the objection to the drawings be reconsidered and withdrawn.

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II. REJECTIONS UNDER 35 U.S.C. §102(b) and 35 U.S.C. §103(a)

Claim 1-3, 13-16 and 19 were rejected under 35 U.S.C. §102(b) as allegedly anticipated by U.S. Patent No. 5,418,546 to Nakagakiuchi et al. (hereinafter, merely "Nakagakiuchi").

Claim 4 was rejected under 35 U.S.C. §103(a) as allegedly obvious in view of Nakagakiuchi.

Claims 8 and 10 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable in view of Nakagakiuchi and U.S. Patent No. 5,517,242 to Yamada et al. (hereinafter, merely "Yamada").

III. RESPONSE TO REJECTIONS

Claim 1 recites, *inter alia*:

"An image pick-up apparatus for picking up an image of object,
the image pickup apparatus comprising:

image pick-up means having a light receiving surface for receiving light from the object to carry out photo-electric conversion, and adapted to output pixel value obtained as the result of the photo-electric conversion;

evaluating means for evaluating the pixel value; and

control means for controlling, in pixel units, exposure time with respect to the light receiving surface on the basis of evaluation result by the evaluating means." (emphasis added)

As understood by Applicants, Nakagakiuchi relates to a visual display system in which light from a light source is modulated by a spatial light modulator having a plurality of controllable elements arranged in a first dimension. The spatial light modulator varies the amount of light received from the lens and supplied to a photoelectric conversion device, thereby controlling the exposure of the image focused by the lens.

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It is respectfully submitted that Nakagakiuchi does not provide the disclosure of claim 1. Column 12, lines 15-19 of Nakagakiuchi states, "...the SLM control unit 45 operates the controllable elements of the spatial light modulator 36 via a bus 46, to reduce the proportion of the image light guided to the second optical path 38."

Applicants respectfully disagree with the assertion that Nakagakiuchi provides the subject matter recited in claim 1.

Applicants respectfully submit that Nakagakiuchi fails to teach or suggest the features of claim 1. Specifically, Applicants submit that there is no teaching or suggestion of an image pick-up apparatus for picking up an image of object, the image pickup apparatus comprising image pick-up means having a light receiving surface for receiving light from the object to carry out photo-electric conversion, and adapted to output pixel value obtained as the result of the photo-electric conversion; evaluating means for evaluating the pixel value; and control means for controlling, in pixel units, exposure time with respect to the light receiving surface on the basis of evaluation result by the evaluating means, as recited in claim 1.

None of the other references cited by the Examiner teach the above defined subject matter of claim 1.

Indeed, Applicants submit that the SLM control unit which operates the controllable elements of the spatial light modulator via a bus is completely different than control means for controlling, in pixel units, exposure time with respect to the light receiving surface on the basis of evaluation result by the evaluating means which evaluates the pixel value.

Applicants submit that the control means controls exposure time with respect to the light receiving surface via a pixel value.

Therefore, Applicants respectfully submit that claim 1 is patentable.

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For reasons similar to those described above with regard to independent claim 1, claims 14-16 and 19 are also believed to be patentable.

Therefore, Applicants submit that independent claims 1, 14-16 and 19 are patentable.

IV. DEPENDENT CLAIMS

The other claims are dependent from independent claim 1, discussed above, and are therefore believed patentable for at least the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

CONCLUSION

In the event the Examiner disagrees with any of the statements appearing above with respect to the disclosures in the cited reference, or references, it is respectfully requested that the Examiner specifically indicate the portion, or portions, of the reference, or references, providing the basis for a contrary view.

Please charge any additional fees that may be needed, and credit any overpayment, to our Deposit Account No. 50-0320.

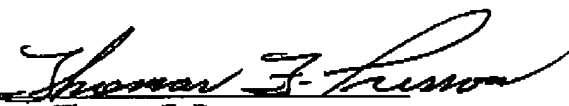
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In view of the foregoing amendments and remarks, it is believed that all of the claims in this application are patentable and Applicants respectfully request early passage to issue of the present application.

Respectfully submitted,

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